

Claims

1. A method of assigning selected ones of a plurality of elevator cars to answer hall calls outstanding in a multifloor building, characterized by:

(a) for each car available to serve a particular hall call outstanding in a building, providing (52) a perceived service time having components (45, 46) based on the estimated time for a selected car to answer said hall call and having components (47, 51) based on the estimated time for said selected car to reach an estimated destination corresponding to said hall call; and

(b) allocating (59) cars to respond to hall calls based on said perceived service times.

2. A method according to claim 1, wherein said step (a) comprises:

(c) determining (45) an estimate of the time that will elapse after being registered before each said call will be answered;

(d) providing (46) a perceived wait time as a first constant times a first non-linear function of each said wait time;

(e) determining (47) an estimate of the travel time that will elapse after said each call is answered before reaching an estimated destination of a passenger registering said each call;

(f) providing (51) a perceived travel time as a second constant times a second non-linear function of each said travel time; and

(g) providing (52) said perceived service time as a summation of said perceived wait time and said perceived travel time for each said wait time and corresponding travel time.

3. A method according to claim 2 wherein:

said second constant and said second non-linear function are selected along with said first constant and said first non-linear function so that a hall call having a relatively long wait time for a particular car will have a relatively short travel time to reach an estimated duration in said particular car.

4. A method according to claim 1 wherein said step (b) comprises:
providing the square (53) of each said estimated service time;
for all possible sets of assignments of all said up hall calls and down hall
calls outstanding in said building, providing (59) a summation of said squares; and
assigning cars to calls (60) in accordance with the one of said sets having
the lowest of said summations (61).